

Mineral Industry Surveys

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SULFUR IN JULY 1999

During the month, production of combined Frasch and recovered elemental sulfur was 809,000 metric tons, according to the U.S. Geological Survey. July production was 3% higher than that of June 1999 and 3% lower than July 1998. Shipments of these combined products were 15% higher than those of June 1999. Ending stocks for July 1999 were 397,000 tons.

Import and export data for July 1999 were not available at the time of publication and will be published in the Sulfur in August 1999 Mineral Industry Surveys along with apparent consumption. Imports of recovered sulfur for June 1999 were 189,000 tons; exports were 109,000 tons. Imports of sulfuric acid for June 1999 were 117,000 tons; exports were 12,000 tons.

Significant adjustments have been made to the sulfur import data. Reports from the Bureau of the Census appear to underreport sulfur imports, especially for material from Canada. The revised figures are based on Census information, data collected and published by the Alberta (Canada) Energy and Utilities Board (EUB) in its monthly production report, and information from other published sources. The EUB report is particularly valuable because the majority of Canadian sulfur is produced in that province, and most of the Canadian sulfur that enters the United States comes from Alberta. When the data problems are solved, USGS will resume using Census data exclusively.

TABLE 1
SALIENT SULFUR STATISTICS 1/

(Thousand metric tons)

Period	Production				Shipments, all sources
	Frasch	Petroleum 2/	Natural gas 3/	Total 3/	
1998:	W	5,700	3,970	9,670	10,100
January-July	W	3,220 r/	2,530 r/	5,750 r/	6,060 r/
July	W	494	342	836	889
August	W	504	313	817	843
September	W	458	246	704	742
October	W	461	286	747	816
November	W	494	291	785	767
December	W	557	310	867	906
1999:					
January	W	498	315	813	811
February	W	457	319	776	760
March	W	510	342	852	807
April	W	510 r/	332	842 r/	829 r/
May	W	497 r/	316 r/	813 r/	817 r/
June	W	466 r/	316 r/	782 r/	712 r/
July	W	492 p/	317 p/	809 p/	820 p/
January-July	W	3,430 p/	2,260 p/	5,690 p/	5,560 p/

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes a small quantity from coking operations.

3/ Includes data from Frasch producer.

TABLE 2
U.S. IMPORTS OF SULFUR 1/

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries 2/	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1998:	1,440	16,900	559	26,900	2,270	58,400
January-June	714 r/	12,200	296	14,200	1,170 r/	35,400
June	117	1,730	53	2,910	199	5,360
July	117	622	42	1,950	167	3,030
August	107	611	38	1,790	182	4,290
September	104	767	59	2,840	182	4,540
October	122	934	41	1,910	181	3,700
November	139	774	41	2,020	199	3,550
December	141	958	42	2,220	193	3,830
1999:						
January	117 r/	953	55	2,760	190 r/	4,470
February	119 r/	968	37	1,990	256 r/	6,070
March	117 r/	1,570	40	2,160	181 r/	4,620
April	118 r/	1,470	39	2,100	171 r/	4,130
May	118 r/	1,450	60	3,280	230 r/	5,600
June	114 p/	886	38	2,040	189 p/	3,640
January-June	700 p/	7,300	269	14,300	1,220 p/	28,500

e/ Estimated. p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

Source: Bureau of the Census; as adjusted by U.S. Geological Survey.

TABLE 3
U.S. IMPORTS OF SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total, all countries 2/		
	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/
1998:	1,550	508	47,800	47	15	400	2,040	667	58,600
January-June	838	274	27,500	21	6	172	1,110	361	33,300
June	118	39	7,110	(4/)	(4/)	15	142	47	7,860
July	121	40	2,970	(4/)	(4/)	20	170	56	4,070
August	126	41	3,670	10	3	39	159	52	4,620
September	100	32	2,830	(4/)	(4/)	22	119	39	3,750
October	126	41	3,760	11	3	52	191	63	4,490
November	111	36	3,390	(4/)	(4/)	26	158	52	4,130
December	133	43	3,610	6	2	67	142	47	4,200
1999:									
January	80	26	2,000	12	4	60	104	34	2,660
February	73	24	2,290	18	6	155	121	40	3,320
March	69	23	2,120	3	1	48	116	38	3,070
April	72	24	2,030	10	3	147	97	32	2,930
May	88	29	2,110	(4/)	(4/)	32	149	49	3,550
June	77	25	1,790	9	2	120	117	38	3,340
January-June	459	151	12,300	52	16	562	704	231	18,900

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

4/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value 2/	Quantity	Sulfur content	Value 2/
1998:	898	35,400	155	51	18,100
January-June	433	19,700	79	26	9,160
June	63	2,830	15	5	1,150
July	155	4,160	17	6	1,940
August	16	1,310	11	4	2,140
September	64	2,650	11	4	1,610
October	104	3,150	14	5	1,530
November	34	1,440	11	4	860
December	92	3,020	13	4	914
1999:					
January	51	2,640	10	3	802
February	34	2,360	16	5	1,360
March	41	3,160	11	4	1,220
April	113	4,760	13	4	1,860
May	14	1,440	13	4	1,130
June	109	3,810	12	3	1,090
January-June	362	18,200	75	23	7,460

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Declared f.a.s. (free alongside ship) valuation.

Source: Bureau of the Census.

TABLE 5
U.S. CONSUMPTION OF SULFUR 1/

(Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1998:	9,230	2,270	11,500
January-June	4,730 r/	1,170 r/	5,900 r/
June	832	199	1,030
July	734	167	901
August	827	182	1,010
September	678	182	860
October	712	181	893
November	733	199	932
December	814	193	1,010
1999:			
January	760	190 r/	950 r/
February	726	256 r/	982 r/
March	766	181 r/	947 r/
April	716 r/	171 r/	887 r/
May	803 r/	230 r/	1,030 r/
June	603	189	792
January-June	4,370	1,220	5,590

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

(Thousand metric tons)

District and source	July 1999 p/		June 1999		Total 1999 2/		Year to date 1998 r/ 2/	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	20	17	14	10	139	129	138	136
Natural gas	3	3	3	3	25	25	28	28
Total	23	21	17	13	163	154	166	164
PAD 2:								
Petroleum and coke	74	74	71 r/	73 r/	469	467	435	435
Natural gas	4	4	4	5	27	27	47	48
Total	78	78	75 r/	77 r/	496	492	482	483
PAD 3: 3/								
Petroleum and coke	294	291	285 r/	275 r/	2,120	2,110	1,960	1,990
Natural gas 4/	216	229	224 r/	175 r/	1,590	1,490	1,910	2,190
Total 5/	510	520	509 r/	450 r/	3,700	3,600	3,870	4,190
PAD 4 and 5: 6/								
Petroleum and coke	104	107	96	97	702	696	688	689
Natural gas	93	93	84	75	623	614	544	533
California	91	95	82	85	607	602	564	563
Total	197	200	180	172	1,330	1,310	1,230	1,220
Grand total	809	820	782 r/	712 r/	5,690	5,560	5,750	6,060

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include revisions to prior months.

3/ Includes Puerto Rico and the U.S. Virgin Islands.

4/ Frasch production is included in the natural gas production to avoid disclosing company proprietary data.

5/ Includes data from Frasch producer.

6/ Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS 1/

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	1999			1998
	July	June	Year to date	Total
Production	9.53 p/	9.51 r/	9.79	9.67
Shipments	9.65 p/	8.66 r/	9.57	10.10
Exports of sulfur	NA	1.33	0.73	0.90
Imports of sulfur:				
Canada	NA	1.39	1.41	1.41
Mexico	NA	0.46	0.54	0.56
Total 2/	NA	2.30	2.45	2.24
Exports of H ₂ SO ₄	NA	0.15	0.15	0.16
Imports of H ₂ SO ₄ :				
Canada	NA	0.94	0.93	1.55
Europe	NA	0.11	0.10	0.05
Total 2/	NA	1.42	1.42	2.04
Consumption: 4/				
Domestic sources	NA	7.34	8.82	9.23
Imports	NA	2.30	2.45	2.27
Total	NA	9.64	11.30	11.50
Sulfur export values 5/	NA	\$35	\$50	\$40
Sulfur import values: 5/				
Canada	NA	\$7	\$10	\$12
Mexico	NA	\$54	\$53	\$48
Average	NA	\$19	\$23	\$27
H ₂ SO ₄ export values 5/	NA	\$91	\$99	\$117
H ₂ SO ₄ import values: 5/				
Canada	NA	\$23	\$27	\$31
Europe	NA	\$13	\$11	\$9
Average	NA	\$29	\$27	\$29

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes other countries not listed.

3/ Less than 1/2 unit.

4/ Because trade data were not available, July consumption was not determined.

5/ Average value per ton for most recent data available.